

# FOLIO

## Anniversary Celebrations Begin

### O! Osiris, Live Forever!

Osiris was the very first mummy. Egyptian legend tells how Osiris, a divine king who ruled with great justice in the original world of creation, was trapped by his evil brother Seth in the world's first sarcophagus. Rescued by his faithful wife Isis and her sister Nephthys, he was buried as the first mummy.

Through the help of his son Horus and his wife, the goodness of Osiris's life was proven before the court of the gods and wicked Seth was properly punished. Osiris then reigned forever as King of the Land, judge of all who died after him. It was the hope of every Egyptian to become like Osiris and to live forever in a world of triumphant justice, a world where evil is left behind, powerless.

Thus, some 2,000 years ago when a certain young Egyptian scribe and priest in his late-20s' died, likely as a result of a cancer which first manifested itself in a tumor in his lower leg and then spread to vital organs, his friends and family ensured that his corpse was properly prepared in anticipation of immortality.

The brain and other internal organs were removed and the chest cavity packed. The heart itself was not removed from the corpse so that it might be weighed in the final judgement before Osiris. It would have to be judged pure by the standard of truth itself before the deceased would be allowed to join Osiris in the Realm of the Dead. An amulet was placed around the neck, and a false phallus was added, for Osiris had sired Horus after his death with the help of

the magic of Isis. Once prepared, the body was tightly wrapped in a high-quality linen cloth which was painted with figures, including that of Anubis, the god of embalming. Finally the body was placed in a coffin constructed of cedar of Lebanon and adorned with hieroglyphs celebrating both the deceased and the Osirian legend.

Great care was taken throughout, for the lately-departed was being prepared for immortality. And the immortality of the soul very much depended upon the preservation of the body.

That this particular scribe attained at least a measure of immortality would be hard to dispute, for now, more than 2,000 years after his death, he is playing a central role in the anniversary celebrations of a University priding itself on 75 years of existence. The scribe, whose mummified remains are now part of The University of Alberta Collections, is the focus of a special Egyptian exhibit mounted as part of the University's 75th Anniversary activities.

The exhibit, which opens on 3 June at the Ring House Gallery, (open 10 a.m. to 5 p.m. weekdays, 10 a.m. to 9 p.m. Thursdays, and 1 to 5 p.m. weekends) will be one of the very first Anniversary events, in fact anticipating the Anniversary year which officially begins on 1 July. The exhibit closes on 3 October following a special viewing which will be part of the Alumni Homecoming '82 activities.



*Osiris himself will be present during the four-month Egyptian Exhibition. The small bronze Osiris is part of the Manchester Museum collection.*

### The Mystery Deepens

From the land of the Nile to The University of Alberta 2,000 years later. How did it come about? Unfortunately, the story is not altogether clear. What is known is that the mummy's coffin shows signs of nineteenth century repairs, and the mummy was likely brought to England by a dealer in antiquities after the turn of the present century. It came to Alberta in the late 1960s, and in 1979 the mummy officially became the property of the University, a bequest of the estate of John Edward Woodrow.

Helen Collinson, Curator of the University Collections, recalls that the mummy was in a very tattered condition when it arrived on campus, badly in need of conservation. It would have to be consolidated and stabilized before it could be displayed.

At about the same time that the mummy was donated, Mrs. Collinson was in England in connection with a special Italian archeology exhibit in which the University was involved. There she learned of work on mummification being done at Manchester University. In 1975, a mummy identified as "1770" in the Manchester Museum collection was unwrapped by a team of experts. The scientific unwrapping of a mummy is an unusual event, and world-wide interest was aroused when the examination took place before BBC television cameras. In their work the Manchester scientists had three basic aims. First, they wanted to collect as much information as possible about the

process of mummification. Secondly, they intended to document living conditions, religious and secular customs, and the health of the people of ancient Egypt. Thirdly, the scientists wished to establish a methodology for the examination of mummified remains that would be practical for others to adopt and adapt. An exhibition related to this work was presented in Manchester and subsequently toured England. "A beautiful collection," says Mrs. Collinson. The Britain "Museum of the Year" judges, sharing her enthusiasm, gave a special award to the exhibit.

It was at this time too that the treasures from the tomb of King Tutankhamen were arousing widespread interest in ancient Egypt. When talk began about special projects to celebrate The University of Alberta's 75th year things came together for Mrs. Collinson, and she began promoting the idea of an Egyptian exhibit — not one attempting to present the kingly riches which are so well known, but one related to mummification and the Egyptian's belief in life after death. "One to make real to people in this part of the world aspects of another culture, at

another time, in a way in which books and photographs cannot."

The idea met with an enthusiastic response from the 75th Anniversary Committee, money was provided, and work began on the exhibit. A request had already been made to the Canadian Conservation Institute, National Museums of Canada, for assistance, and experts from the institute proceeded to consolidate and stabilize the Alberta mummy. The wrappings of the mummy were dry cleaned and arranged; the painted area of the shroud cloth was relaxed and stabilized; and the head, which had become separated from the body, was placed on a support, as was the rest of the body.

#### *Fact Finding Mission*

Prior to the conservation, a detailed scientific investigation of the mummy along the Manchester lines took place. Radio carbon dating done at the Saskatchewan Research Council showed the cloth wrappings to be 2,115 plus or minus 105 years old. Similar testing of the coffin placed its age at 2,320 plus or minus 125 years.



*Also on loan from the Manchester Museum is the Cartonnage Mask from the 1770 Mummy. Placed over the Mummy before burial, the mask has a gilded face and inlaid eyes.*



*Helen Collinson, Curator of the University Collections, prepares a display for "O! Osiris, Live Forever!" Behind her is the mural painted for the Egyptian exhibition by H.A. Glyde.*

Charles Baker of the University's Faculty of Dentistry and Bill Castor of the W.W. Cross Cancer Institute, were instrumental in providing other information about the mummy. Using standard and special radiological procedures, they were able to uncover a number of facts.

Dental x-rays indicated that the mummified individual had had two mandibular or first molars removed at an early age. The jaw films showed abrasion of the teeth consistent with a rough or coarse diet, which is typical in Egyptian mummies due to the considerable amount of fine sand left by primitive milling techniques in the bread which they ate. The abrasion of the teeth, the presence of moderate amounts of periodontal disease, and the eruption of the teeth pointed to an individual between the ages of twenty-five and thirty.

Ordinary x-ray examination was made of the head, chest, abdomen, pelvis, and legs of the mummy. This indicated packing in the chest cavity, evidence of an amulet above the sternum, a thickened amount of bone around the right fibula, and the presence of a false phallus. To obtain greater detail, in interesting areas

a more sophisticated x-ray technique, computed tomography, was used. This revealed how the brain had been removed — through the nostrils — confirmed the presence of the amulet, likely the tooth of a large cat strung on a leather thong, and clearly identified a lesion in the right fibula that is consistent with a discrete tumor being present in the bone. The tumor could very likely have been responsible for the death of the mummified individual through distant metastasis (spread of the cancer) to vital organs that were not preserved with the body. Computed tomography also demonstrated the presence of the heart, a finding consistent with Egyptian burial procedures.

The exhibit mounted for the 75th Anniversary celebration features a number of different elements. Central to it is the University mummy at rest in a room reminiscent of an Egyptian tomb, complete with the artifacts commonly found therein — artifacts such as a wooden model farm, numerous figures to do the work of servants, and other accoutrements of daily living, such as furniture and pots. Ancillary rooms will present

## FOLIO

*Volume Eighteen  
Number Forty-seven*

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*The Office of Community Relations  
produces Folio on a weekly basis for the  
staff and other interested persons. Folio  
contents may be reprinted with  
acknowledgment.*

*ISSN 0015-5764  
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material related to the gods of Egypt, particularly those most closely associated with the concepts of immortality, resurrection, and the mythology of the tomb. Other material will relate to the scientific investigations at Alberta and Manchester, and this will include a videotape of the unwrapping of mummy "1770".

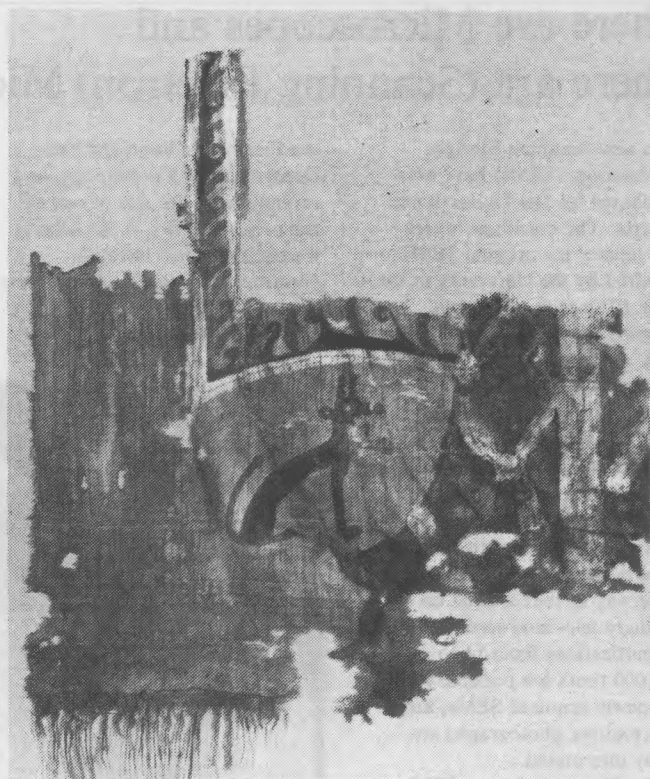
The University of Alberta purchased the entire series of panels produced for the Manchester exhibit after consultation with R.C. Smith, Chairman of the Classics Department, who judged them to be well suited to teaching purposes. Other material has been borrowed from Manchester and from the Royal Ontario Museum.

Another highlight of the display is a facsimile of a mural

of the weighing of the heart ceremony, such as might be found in an Egyptian tomb. That mural is the work of H.G. Glyde. An accomplished artist, Mr. Glyde was for many years Head of the University's Department of Art, during which time he painted murals for the Rutherford Library and the Wauneita Lounge. He is also Mrs. Collinson's father.

All of the many aspects of the Egyptian exhibit are brought together with a title that salutes the King of the Land and the Judge of the Dead: "O! Osiris, Live Forever!"\*□

\*Folio is indebted to the Alumni Association's publication New Trail for the above article.



*A part of the University Collections, and a bequest of John Edward Woodrow, this fragment is from the wrappings of the Egyptian mummy. The animal featured on the fragment is Anubis, God of Embalming.*

## Workshop to Study Women and the Alberta Economy

An interdisciplinary committee has been formed at The University of Alberta to organize a workshop on "Women and the Alberta Economy: Directions for Research." The Alberta Workshop Organizing Committee was struck in response to an invitation from the Social Science and Humanities Research Council (SSHRC) to provide feedback on the SSHRC decision to fund a major research thrust on Women and the Canadian Economy.

The workshop, to be held on 18 and 19 September in Red Deer, will bring together key university researchers, representatives of women's groups, unions, and relevant government departments. Participants will identify what research needs to be done in Alberta and how best to do it, and will discuss the practical problems of translating research findings into programs of action.

To this end, the committee is asking for help. In order to obtain the maximum input from the greatest number of concerned groups and individuals, the

committee asks that anyone interested in "Women in the Alberta Economy" respond to two major questions: What are the major issues regarding women and the Alberta economy on which more information is required? What are you/your group currently doing in this area?

Responses to these questions will help the planning committee identify specific topics for discussion at the Red Deer workshop and indicate just who should be invited to participate in the workshop.

The Alberta Workshop Organizing Committee consists of Dallas Cullen (Business), Ann Hall (Physical Education), Jean Lauber (Zoology), Graham Lowe (Sociology), Sandy Susut (Extension Women's Program), and Rosalind Sydie (Sociology). Anyone wishing to reply to the committee's questions is asked to forward their views to Sandy Susut, Women's Program, Faculty of Extension, 236 Corbett Hall. □

## Pension Reform for Women is Focus of Women's Program Seminar

Only thirty-four percent of Canadian women are covered by private pension plans. Nearly two-thirds of Canadians over sixty-five living below the poverty line are women. And there's more. At present, there is no provision for the continuation of pension benefits for women who leave the work force to raise a family.

These are but a few of the issues that will be discussed at "Pension Reform for Women," a seminar sponsored by the Women's Program of the Faculty of Extension. Organized in cooperation with a number of local women's groups, the seminar will be held on 12 June in Corbett Hall (Studio Theatre).

The Federal Task Force on

Pensions will release its report on pension reform within the next few weeks and it is hoped that the seminar will inform women about the issues involved in order that they may respond to the task force report and make constructive suggestions.

The keynote speaker for the seminar will be Louise Dulude, lawyer, and author of *Pension Reform with Women in Mind*.

Grants from National Health and Welfare and the Secretary of State have reduced the cost of the seminar to \$15 (\$8 for pensioners and students). More information on the seminar, which runs from 10 a.m. to 4:30 p.m. in Studio Theatre, may be obtained by contacting the Women's Program at 432-3093. □



## There are Microscopes and There are (Scanning Electron) Microscopes

Two new Scanning Electron Microscopes (SEMs) have been purchased by The University of Alberta. The machines, which will replace the original SEMs acquired by the University in the early 1970s with a National Research Council grant award to D.A. Craig, Professor of Entomology, will be available for use by all University Faculties and Departments.

A Scanning Electron Microscope is a very powerful microscope which uses a scanning electron probe to create a three-dimensional picture in much the same way as that created on an ordinary television screen. Magnifications from 14 to 240,000 times are possible with the newly acquired SEMs, and the resulting photographs are easily interpreted.

The University's new SEMs have been described by George Braybrook, Electronics Technician in Entomology, as amongst the "latest and greatest" in SEM equipment. The machines (a Cambridge Stereoscan 100 and a Cambridge Stereoscan 250) were purchased for a number of reasons: they are smaller, more compact, give higher resolution and a clearer, more precise picture. In addition — and this, says Mr. Braybrook, is a key factor — the SEM 100 is much easier to operate.

The use of an SEM has increased tremendously since the University's first machines were purchased. A growing number of disciplines are now making use of the SEM, and the ease of operation of the 100 means that it can be operated by someone other than Dr. Craig or Mr. Braybrook. As a result, the two machines can be operated simultaneously and the backlog of work can be cleared up.

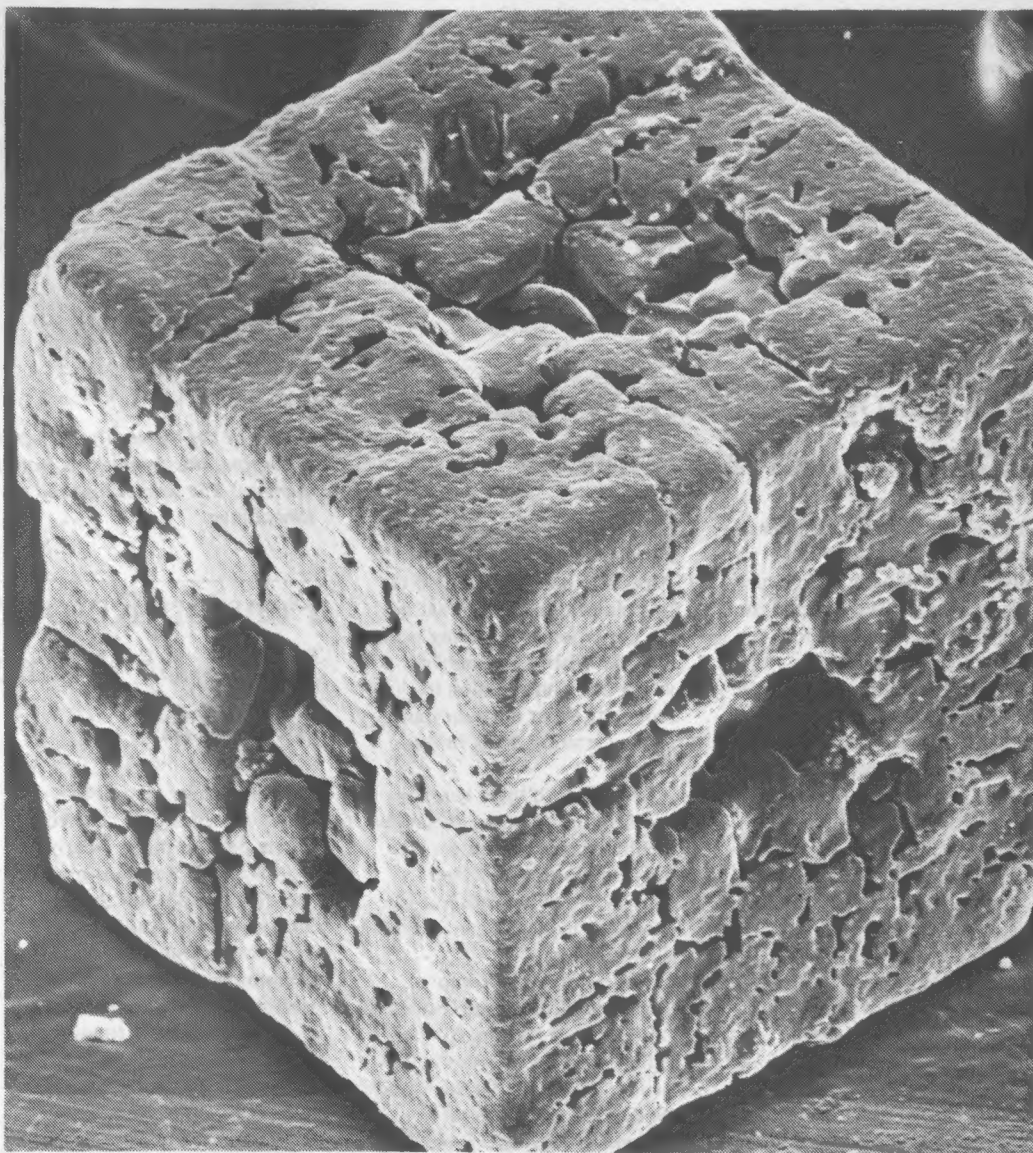
Funding for the SEMs (nearly \$250,000 for the two machines and the auxiliary equipment) has come from a number of sources. A grant to Dr. Craig from the National Science and Engineering Research Council, moneys from

the President's Fund and the Department of Entomology, and revenue from the sale of one of the original SEMs to the Alberta Research Council have all contributed to the purchase of the new equipment.

The new SEMs, to be housed

in and administered by the Department of Entomology, will be given a careful once-over later this month at the 9th Annual Meeting of the Microscopical Society of Canada. The meeting, to be hosted by this University, will be held on campus from 11

to 13 June. It will provide specialists in all aspects of microscope technology an opportunity to meet and discuss a host of related topics. The University's SEMs will be on display for the duration of the meeting. □



*What is it? An eraser? A piece of sea-foam candy? A sugar cube? No, no, and no again. Then what? We'll give you a hint. It's a relatively commonplace object, magnified some 500 times on one of the University's newest Scanning Electron Microscopes. And now it's up to you. Folio will award two prizes, appropriately selected, in this, our initial SEM Contest: one for the first correct answer; a second for the most original answer. Winners will have to answer a skill testing question. Members of the Office of Community Relations and the Department of Entomology are excluded. Don't miss out! Send in your entries now to Folio, 423 Athabasca Hall. Deadline: 11 June 1982.*

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## AHFMR Visiting Professor on Campus This Week

John V. Basmajian, a Visiting Professor of the Alberta Heritage Foundation of Medical Research, is a guest of The University of Alberta this week. Dr. Basmajian, internationally recognized as a physician, scientist, and researcher, has met with members of the Faculty of Rehabilitation Medicine, the Departments of Anatomy and Physiology, and the Faculty of Physical Education and Recreation, and has delivered lectures on "Muscles, Motor Units and Their Control" and "Clinical Biofeedback — Principles and Practice." He will also deliver the keynote address at the Science in Physical Therapy Conference to be held

on campus on 4 and 5 June.

A Visiting Professor of the Alberta Heritage Foundation of Medical Research (AHFMR) is a prestigious appointment; each year only a handful of scientists of excellence are chosen by the Foundation.

The man responsible for the selection of Dr. Basmajian is S. Kumar, Associate Professor of Physical Therapy. Recognizing the many contributions Dr. Basmajian has made in numerous fields related to rehabilitation medicine, Dr. Kumar requested that the AHFMR name him as a Visiting Professor.

"He is an outstanding Canadian," says Dr. Kumar. "He has published twelve books

in five languages, has produced several motion pictures, and was a prime mover in the use of biofeedback in the treatment of rehabilitation patients."

Dr. Basmajian, who visited the University of Calgary before coming to this University, is the recipient of the 1977 Gold Key of the American Congress of Rehabilitation Medicine, is an Honorary Fellow of the Royal College of Physicians and

Surgeons, was named to "2,000 Men of Achievement" in 1977, and has lectured at more than one hundred universities in Canada, the United States, Asia, Australia, and Europe. He is currently the Director of Rehabilitation Programs at Chedoke-McMaster Hospital and Professor of Medicine at McMaster University in Hamilton, Ontario. □

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## CAUT Elects New President

The Canadian Association of University Teachers (CAUT) has a new President. Ken McGovern, Professor of Philosophy at Campion College, University of Regina, was elected to the position at the CAUT annual meeting held in Ottawa recently.

Dr. McGovern, a graduate of the University of Windsor, served as Chairman of the Faculty Association of the University of Regina and, for the past two years, has been Vice-President Internal of CAUT.

Also elected to the CAUT

executive were: Sarah Shorten, University of Western Ontario, Vice-President Internal; Philip Welch, Faculty of Medicine, Dalhousie University, Vice-President External; and Edward Maher, Department of Business Administration, University of New Brunswick, Treasurer. The Past President of CAUT is Jim Foulks, Faculty of Medicine, University of British Columbia.

CAUT is a national organization whose membership boasts 26,000 faculty and professional librarians. □

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## Department of Mathematics to Host International Conference

The Department of Mathematics will host an international conference on approximation theory and allied fields. The conference will run from 7 to 11 June and about eighty participants from Hungary, Poland, Germany, Netherlands, Sweden, the United States, India,

and Canada are expected to attend.

The conference lectures will be delivered on the second and third floors of the Central Academic Building (CAB). More information may be obtained by contacting the Department of Mathematics at 432-3396. □

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## President to be Honored by Alma Mater

Myer Horowitz, President of The University of Alberta, will receive the degree of Doctor of Laws, *honoris causa*, from Concordia University at its Spring Convocation. J.W. O'Brien, Rector and Vice-Chancellor of Concordia, said that in selecting Dr. Horowitz, Concordia was seeking "to honor a distinguished alumnus...and to pay tribute to the great contribution to education in Quebec, and generally in Canada" made by the President.

Dr. Horowitz, who received his BA from Concordia (then Sir George Williams) University in 1956, has long been involved in the field of education.

A school teacher in Montreal for six years, and a Professor of Education at McGill University for nine, Dr. Horowitz came to The University of Alberta in 1969. In his dual role as educator and administrator, the President has been a driving force in the Faculty of Education and the University community as a whole.

Concordia University is an amalgamation of Sir George Williams University and Loyola College. "When I took my degree at Sir George," recalls President Horowitz, "it was actually called Sir George Williams College of the Montreal YMCA. And I have a particularly soft spot for Sir George because it allowed full-

time teachers like me to get a first degree through its Evening Division. It's a delight for me to go back. I'm flattered, and I'm honored."

Dr. Horowitz, who will receive his degree on 13 June at the Loyola Campus, will give the Convocation Address. □

*people*

Bruce Bain (Educational Psychology) and Arnold Raisner (Columbia) debated "the cultural context of second language learning" vs "the functional independence of second language learning." Dr. Bain argued for the former, and Dr. Raisner the latter at the Teachers of English as a Second Language Conference, Honolulu.

Dr. Bain was also an invited lecturer at the Languages of Man Seminar, University of Hamburg. He spoke on the history of language research in Canada.

Clifford G. Hickey (Anthropology) recently organized and chaired a symposium at the annual meeting

of the Canadian Archaeological Association in Hamilton, Ontario (29 April to 2 May). The symposium, entitled "The Copper Inuit: significant cultural change in the post-Contact/pre-Ethnographic period," brought together the research results of a number of scholars centred at the University. In addition to two papers by Dr. Hickey, presentations were given by M. Kerkhoven and B. Schweger of the Faculty of Home Economics; M. Wayman of the Department of Mineral Engineering; and T. Gibson, J. Savelle, R. Will, W. Kowal, and R. Cole-Will of the Department of Anthropology.

After the meetings, Dr. Hickey spent two weeks in England continuing his research into the effects of 19th century Arctic explorations on native groups. He spent time at the Scott Polar Research Institute at Cambridge, the National Maritime Museum, the Royal Geographic Society, and the British Museum (of Mankind), among other institutions.

Archaeological and ethnohistorical work in the western Canadian Arctic will continue this summer.

**Mervyn J. Huston** (Professor Emeritus) was awarded the degree of Doctor of Laws, *honoris causa*, by Dalhousie University for his contribution to teaching, science, and professional affairs. He presented the Convocation Address at the graduating ceremonies of the Faculty of Health Professions on 13 May in Halifax.

Dr. Huston was a member of the Faculty of Pharmacy and Pharmaceutical Sciences for thirty-nine years and served as Director and then Dean of that Faculty from 1947 until his retirement in 1978.

**Tracy Mills** (Panda Volleyball Club) has been selected for Canada's National Women's Volleyball Team. Miss Mills, a graduate of Strathcona High School, is currently working out with the team in Ottawa in preparation for the 1983 World University Games.

Another Panda, **Toni Kordic**, has been invited to Canada's National Basketball Camp. Miss Kordic, the 6'2" centre of the Pandas Basketball Club, is one of only thirty-five candidates invited to the Waterloo, Ontario, camp. Following the training camp, the team will compete in several overseas tournaments including those in Taiwan and Bulgaria.

**John J. Mitchell** (Educational Psychology) has cooperated with the U.S. National Commission of Resources for Youth in the publication of a handbook which focuses on youth participation and the 10 to 14 year old. The brochure, entitled *New Roles for Early Adolescents*, includes an introduction written by Dr. Mitchell and has been distributed to all youth organizations and thousands of schools throughout the United States.

The Canadian Association of Professors of Medicine at its recent Spring meeting elected **George D. Molnar** (Medicine) as its President. Dr. Molnar is Professor and Chairman of the Department of Medicine, University of Alberta.

**Herman Tennesen** (Philosophy) will be lecturing to the International Symposium, organized by *Die Forschungstelle für Österreichische Philosophie*, held in the *Wittgensteinhaus*, Vienna, on: "Die sogenannte 'Kindersprache' von Otto Neurath und die Einheitswissenschaften" and "Protokollsätze im Lichte der Unzuverlässigkeit der Sinne." He is also invited to give a series of lectures at The University of Uppsala, Sweden. He will read a paper on "The very idea of an evolutionary epistemology" before the Seventh International Wittgenstein Symposium, Kirchberg am Wechsel, Austria, 22 to 27 August. On the 29th he is taking part in an international symposium on Varieties of Structural Approach in Sociology at the Interuniversity Centre in Dubrovnik, Yugoslavia while attending a meeting of the Executive Council of that centre. Part of Dr. Tennesen's travel

expenses is covered by a grant from the Humanities and Social Sciences Research Grants Committee.

## publications

Kirman, Joseph M.  
(Elementary Education): "Use of band 5 black and white Landsat images in the elementary grades." *Journal of Geography*. LXXX (November, 1981): pp. 224-228.

## The Calendar

*Folio* trusts that the gaffs will not be out in full force because of the gaffes in the "Important Dates in June" schedule (*Folio*, 27 May 1982, page 5).

The correct dates for the GFC Executive Committee meetings are 7 and 21 June. The Special Convocation at St. Paul, at which Mother Teresa of Calcutta will be conferred an honorary Doctor of Laws degree, will take place on 25 June.

With respect to the absence of the traditional double page calendar, it seems that a number of readers concur with Kathleen Watson of the R.S. McLaughlin Examination and Research Centre who wrote to *Folio* as follows: "I am writing in regard to the calendar being dropped from *Folio*. I was disappointed to pick up the 27 May issue and find no usual calendar inside. I use the calendar every month and sincerely hope that you will consider putting it back."

How do you feel about the calendar? Although it was missing from the end of May issue, it can doubtless be resurrected for the end of June issue if enough readers feel that it should be published. *Folio* (423 Athabasca Hall, telephone 432-2325) awaits your wishes.

## Folio accepts display advertising

*Size and rates:* the basic unit size is 21 agate lines x 11 picas (1½" x 1⅞"). The full page is divided into 22 such units, any combination of which is available at a cost of \$15 per unit. Half page costs \$165. One column costs \$82.50. A professional/business card unit is available at a cost of \$30. Discounts are offered for extended runs, please enquire.

*Other specifications:* half-tones (100-line screen or less) are acceptable; no colour or bleeds. Camera-ready copy is necessary. There is a charge of 30c per word for typesetting, and \$7.50 for adjustment of design work. Deadline for submission is one week prior to publication (Thursday, 3 p.m.). Acceptance of advertisements and positioning are at the discretion of the editor.

These rates are effective from 1 January 1981. For more information please telephone 432-2325 and ask about *Folio* display advertising or write to:

*Folio Display Advertising*  
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423 Athabasca Hall  
The University of Alberta  
Edmonton, Alberta  
T6G 2E8

## service information

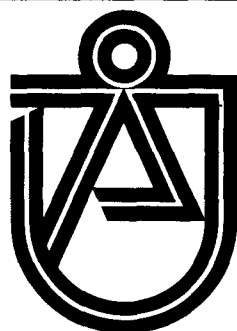
All information to be included in this column must reach the Office of Community Relations by 9 a.m. the Thursday prior to publication.

### Coming Events

#### Music

#### SUB Theatre

Until 5 June. Alberta Dance Educators



For 75th  
Anniversary  
Program  
Information  
432-2325

#### June Watch

*The Egyptian Exhibition now on display through to 3 October 1982. Ring House Gallery. An exhibition of ancient Egyptian artifacts drawn from the University Collections and from the Museum of the University of Manchester.*

Association's Annual Dance Festival. For more information, phone Marie Casey at 463-2105.

8 June, 7:30 p.m.

Marr-Mac dance recital. Tickets available at Marr-Mac Schools.

#### Lectures and Seminars

##### Alberta Heritage Foundation for Medical Research, Visiting Professor

J.V. Basmajian, Director, Rehabilitation Medicine, McMaster University, will give three lectures under the sponsorship of the Department of Physical Therapy. 3 June, 1:30 p.m., "Clinical Biofeedback — Principles and Practice." 2-115 Clinical Sciences Building. Science in Physical Therapy Conference, Tory (Turtle) Building. Session I: "Clinical Research is the Key" (4 June, 9 a.m.); Session V: "Electromyography Comes of Age" (5 June, 8:30 a.m.)

#### Department of Biochemistry

8 June, 4 p.m. R.B. Gennis, University of Illinois, on "Pyruvate Oxidase and E. coli Aerobic Respiratory Chain." 2-27 Medical Sciences Building.

#### Exhibitions

##### Ring House Gallery

3 June to 3 October. "O! Osiris, Live Forever!" An exhibition on the scientific investigation of mummification. The exhibit is jointly organized by University Collections and Manchester University Museum, England.

#### Conventions

##### Alberta Dental Association 1982 Convention

Date: 9 to 12 June. For further information, phone 432-5023.

#### Non-Credit Courses

##### Faculty of Extension

##### Effective Helping

Date: 14 and 15 June. Time: 9 a.m. to 4 p.m. Fee: \$30.

For more information, phone 432-5069.

##### Urban and Rural Planning

##### Studies Medium Density Housing

Date: 7 June. Time: 9 a.m. to 5 p.m. Fee: \$80. Registration Deadline: 2 June. For more information, phone 432-2912.

##### Devonian Botanic Garden

##### Wild Edibles

Date: 12, 16, and 19 June. Fee: \$30.

##### Spring Wildflowers at the Garden

Date: 13 June. Fee: \$10.

#### Computing Services

##### Client Training Sessions

Computing Services is taking registrations between 8:30 a.m. and noon for the following non-credit courses. For further information, please telephone Information Services at 432-2463, or come to 352 General Services Building.

##### Introduction to Plotting

Course number: 726. Date: 14 and 17 June.

Time: 9 to 11 a.m. (14th), 1 to 4 p.m. (17th). Fee: \$20. Prerequisites: FORTRAN, basic MTS and Editor commands. Place: 328/351 GSB.

##### Introduction to SPIRES

Course number: 735. Date: 21 June. Time: 1 to 4 p.m. Fee: \$5. Prerequisites: "MTS and Editor Fundamentals" and a good working knowledge of file editing and terminal use. Place: 328/351 GSB.

##### Introduction to Typesetting

Course number: 750. Date: 14, 16, 21, and 23 June. Time: 2 to 4 p.m. Fee: \$15. Prerequisites: Introduction to Textform. Place: 328/357 GSB.

##### Introduction to Computing

Course number: 661. Date: 22 June. Time: 2 to 4 p.m. Fee: \$5. Prerequisites: No previous computing experience, but familiarity with a keyboard is required. Place: 351 GSB.

##### Integrated Graphics Overview

Course number: 728. Date: 23 June. Time: 9 to 11 a.m. Fee: \$5. Prerequisites: "Introduction to Plotting" is recommended. Place: 328 GSB.

##### MTS and Editor Fundamentals

Course number: 679. Date: 23, 25 June. Time: 2 to 4 p.m. Fee: \$10. Prerequisites: "Introduction to Computing" or equivalent working knowledge of a DECwriter terminal and MTS. Place: 351 GSB.

##### Introduction to MTS for Programmers

Course number: 729. Date: 28 June, 5 July. Time: 9 to 11 a.m. Fee: \$10. Prerequisites: None. Place: 328/351 GSB.

### Research Grants

#### Granting Agencies:

##### Application Deadlines

This list of deadline dates for submissions to granting agencies for research funds, exchange programs, and travel grants is published every month in *Folio*. In order to allow sufficient time for processing, all applications should reach the Research Grants and Contracts Office at least ten days before the deadline date. Where other University resources are involved, the time requirement may be much longer than ten days and such applications should therefore be submitted well in advance. An extra copy of the application should be provided for the Research Grants and Contracts Office.

Further information may be obtained by consulting the *Calendar of Granting Agencies for Research Funds, Exchange Programs, and Travel Grants*, which is available in the offices of Deans, Directors of Institutes, Centres, and Schools, and Department Chairmen, or by phoning the Research Grants and Contracts Office, 432-2002. Note: Although the *Calendar* is updated on a continuous basis, the following information could be subject to change without notice. If staff members have advanced information on forthcoming changes, the Research Grants and Contracts Office would appreciate being advised. Code: (R) Research funds; (E) Exchange programs; (T) Travel grants

Granting Agency	Deadline Date
Canada Mortgage and Housing Corporation — \$2,500 Small Grant (R) (95)	30 July
Department of National Health and Welfare — National Health Research and Development Program Project Grants & Research Personnel Career Awards (R) (155)	31 July
Social Sciences and Humanities Research Council — Travel Grants for International Scholarly Conferences (T) (394)	1 July
— Grants for International Congress held in Canada (R)(T)	1 Nov.
U.S. Department of Health, Education, and Welfare	1 Mar.
— New and Supplemental	1 July
— Renewals	1 Nov.
	1 Oct.
	1 Feb.
	1 June

### Surplus Equipment

The equipment appearing in this column is available only to University Departments with University Administered Funds. For further information about the purchase of equipment or the disposal of any of your department's surplus equipment, contact Bonnie O'Dwyer or Roy Bennett, telephone 432-3208.

Texas Instrument — Silent 700 Electronic Data Terminal W/APL. For further information, contact Francis Chin at 432-2347.

### Notices

#### Clinical Sedative Trial

Insomniacs: Do you (1) take longer than one-half hour to fall asleep, (2) sleep less than 6 hours a night, (3) wake too early or (4) wake up more than twice a night? Clinical sedative trial underway. Break the cycle. Limited numbers accepted. Call Dianne at Research Clinic, Clinical Sciences Building, 432-6480 or 432-6599.

#### Swimming Lessons

Swimming lesson registrations are now being taken by the Faculty of Physical Education and Recreation for three summer programs: 28 June to 9 July, 12 to 23 July, and 26 July to 6 August. To register, telephone 432-3570.

### Positions Vacant

The University is an equal opportunity employer but, in accordance with Canadian Immigration requirements, these advertisements are directed to Canadian citizens and permanent residents.

#### Faculty of Business, The University of Alberta: Faculty Service Officer II

Responsibilities: providing programming and statistical assistance to faculty members; initiating and carrying out research projects typically involving the application of advanced statistical, mathematical, and computation techniques to business problems; establishing and expanding data

bank packages to provide interactive facilities for students and faculty; evaluating existing statistical packages and development of new computational techniques for advanced business research; developing computer-assisted instructional packages for classroom use (e.g. robust tests, ridge regression, and other time series analysis techniques); organizing seminars for faculty and students computer facilities; providing programming consulting to students; performing such administrative duties as may be assigned.

**Qualifications:** Doctoral level education in appropriate areas plus work experience at the interface between business school research and computer use. **Salary:** Commensurate with experience (range is \$27,720 - \$39,820). **Closing date for applications:** 30 June 1982. Submit resume to:

Roger S. Smith, Dean, Faculty of Business, 399B Central Academic Building, The University of Alberta, Edmonton, Alberta, T5G 2G1

### Non-Academic Positions

To obtain further information on the following positions, please contact *Personnel Services and Staff Relations, 2-40 Assiniboia Hall, telephone 432-5201. Please do not contact the department directly. As positions are filled on an ongoing basis, these vacancies cannot be guaranteed beyond 28 May 1982.*

Clerk (\$1,030-\$1,232)  
Bookstore  
Library Clerk II (Trust)  
(\$1,106-\$1,324) — Extension — Legal Resource Centre  
Data Entry Operator I  
(\$1,185-\$1,426) — Computing Services  
Clerk Steno III (\$1,232-\$1,487)  
— Business Administration & Commerce, Educational Administration  
Student Records Processing Clerk  
(\$1,232-\$1,487) Term to November/82, Graduate Studies and Research  
Dental Assistant II (Trust)  
(\$1,324-\$1,616) — Mobile Dental Clinic  
Secretary (\$1,373-\$1,682) —  
Nursing, Centre for Study of Mental Retardation, Anthropology, Psychology, Vice-President (Finance & Administration)  
Medical Steno (1,373-\$1,682) —  
Psychiatry  
Administrative Clerk (\$1,373-\$1,682) —  
Elementary Education, Housing and Food Services  
Library Assistant II (\$1,373-\$1,682) —  
Music  
Departmental/Executive Secretary  
(\$1,548-\$1,908) — University Collections, Office of the Vice-President (Research)  
Computer Assistant (\$1,106 - \$1,324 —  
Computing Services  
Building Services Worker IV  
(\$1,487-\$1,829) — Physical Plant (Building Services)  
Computer Operator (\$1,487-\$1,829) —  
Computing Services  
Biochemistry Technologist I (Trust)  
(\$1,616-\$1,922) — Surgery  
Dental Hygienist (Term) (\$1,682-\$2,078)  
— University Health Services  
Administrative Assistant I  
(\$1,754-\$2,171) — Immunology, Rehabilitation Medicine  
Laboratory Technologist I  
(\$1,754-\$2,171) — Provincial Laboratory

Maintenance Worker II  
(\$1,754-\$2,171) — Housing and Food Services  
Console Operator (\$1,908-\$2,368)  
— Computing Services  
Senior Coordinator I  
(\$1,908-\$2,360) — Office of the Registrar  
Programmer/Analyst II (\$2,078-\$2,581)  
— Physical Plant (Energy Management)  
Dental Technician IV (\$2,265-\$2,821) —  
Dentistry  
Building Services Coordinator  
(\$2,368-\$2,951) — Housing and Food Services  
Programmer/Analyst III (Trust)  
(\$2,477-\$3,085) — Computing Science  
Programmer/Analyst III (\$2,477-\$3,085) — Office of Administrative Systems  
Instrument Mechanic (\$2,518.53) —  
Physical Plant  
Programmer/Analyst IV (\$2,951-\$3,687)  
— Physical Plant (Energy Management)

*The following is a list of currently available positions in The University of Alberta Libraries. The bulletin board in Cameron Library, Room 512, should be consulted for further information as to availability and position requirements.*

Library Clerk III (\$1,232-\$1,487) —  
Periodicals & Microform

## Advertisements

*Advertisements must reach the Editor by 3 p.m. on the Thursday prior to publication date which date also serves as the deadline for cancellation of advertisements. The cost of placing advertisements is 30 cents per word with no discount for subsequent insertions. There are no refunds. There is a maximum limit of 30 words and a minimum charge of \$1.50. Contributors' corrections will be assessed at \$1.50 for each line in which an alteration is made. Advertisements cannot be accepted over the telephone.*

### Accommodations available

For sale — Riverbend. Luxury condo house, 1,440 sq. ft., three bedrooms, separate dining, double garage. Carpets/wood fixtures. \$75,000 1st at 13.5%, Oct. 1985. Save: buy from owner \$110,000 firm. Call 428-6381.  
For sale — Claridge House. Condominium, 11027-87 Ave. Immaculate, sunny living room, balcony, southern exposure, view, two bedrooms, two baths, two parking stalls, laundry ensuite. Maxine Tipper, Potter Realty 436-3050, 435-7103.  
For sale — By owner, west end duplex. Three bedroom, 1½ baths, large fenced yard. Five appliances and drapes included. Direct bus to University. \$55,500 at 10.75% until March 1985. \$77,900. 487-5375.  
For sale — Windsor Park. Split-level, fully developed, new kitchen, large lot, double garage. Resi Richter 483-9432, 455-4135. Weber.  
For sale — Greatly reduced, Belgravia. Two bedrooms up, two down, two baths, rumpus room. Resi Richter 483-9432, 455-4135. Weber.  
For sale — By owner. Three-bedroom bungalow, 1,300 sq. ft., fully landscaped, attached double garage. 481-0131 after 6 p.m. weekdays.

For sale — Home with a view only 15 minutes to University area. Three bedrooms, large living room, dining room, mature landscaping. \$157,000. Phone Gladys Schuler. Spencer Real Estate. 423-0718, 436-5250.

For sale — Garden Grove condominium. Duggan. French Immersion, one block. Three bedrooms. \$40,000 mortgage. Pat Anholt, Potter Realty 436-3050 (pager), res. 436-1559 or Maxine Tipper 435-7103.

For sale — Four bedroom split-level in Greenfield, quiet street near schools. Mature garden with apple, plum, other fruits. All major appliances, new carpets. Available late Aug. \$120,000. 435-2855.

For sale — "A lot of trees." Professor's dream home near University. Newly renovated retreat for the academically inclined. Asking \$95,900. Call Earl 436-4488. A.E. LePage (Prairie) Ltd.

For rent — Sabbatical house, four bedrooms, finished. Belgravia, summer 1982 to summer 1983. 434-0817, 432-3341.

For sale — Seven unique townhomes, two blocks from campus. All units have private entrances, fireplaces, skylights, underground parking, two or three bedrooms. Prices from \$119,500. Ed Lastiwka 437-4984. A.E. LePage.

For sale — University area. Two level terrace home. Over 1,400 sq. ft. Two bedrooms, two baths, fully carpeted, fireplace, all appliances. Only \$99,500. Immaculate! Patricia Teitzen. A.E. LePage 437-7480, 434-4825.

For rent — Three/four bedroom house, double garage, garden, 1½ baths, near Southgate. \$750/month, no pets. 435-5932.

Shared — For single professionals. Relaxed atmosphere, forty years plus, on direct bus lines. 434-7547 evenings.

For sale — 1,584 sq. ft. bungalow with developed basement and lovely yard. Excellent Windsor Park location. Price \$155,900. Regina Machinski, Cowley & Keith Real Estate 465-5163, 438-1333.

For rent — Immaculate, one bedroom condominium, 101 Ave., 118 St., five appliances. 436-9516.

For sale — Close to University. Extremely well kept three bedroom bungalow, professionally finished basement, double garage. Close to French Immersion School, all amenities. Reduced \$109,900. Bob Hawkins 436-3050, 434-0854 res.

For sale — Walk to University. Well kept two bedroom bungalow. Two bedroom basement suite. Quiet neighborhood. \$115,500 with 16% mortgage for three years. RE/MAX Real Estate. Clarence 438-1575, evenings 434-5296.

For sale — \$59,500. University area, newly decorated, upgraded; older, two bedroom home. Try Alberta Home mortgage. Call Eve Turner 464-6761, 436-5250 Spencer's.

For sale — Windsor Park. Super, three bedroom bungalow. Fully developed, excellent University location. Also have another bungalow and semi-bungalow in area. Chris Tenove 433-5664, 436-5250 Spencer's.

For rent — Two bedroom house, University area. Single garage, five appliances. Available 1 July - one year \$600/month. 433-7851.

For sale — Close to University, good home, 1,500 sq. ft., garage. Basement suite. Resi Richter 483-9432, 455-4135. Weber.

For sale — Parkallen. Three bedroom, semi. Good mortgage, garage. Resi Richter 483-9432, 455-4135. Weber.

### Accommodations wanted

Professor and wife seek fully furnished two bedroom apartment. First Sept. - June 1983. 437-2174.

Professor on sabbatical wishes to rent furnished house (three or four bedrooms), 1 Sept. 1982 for one year. Dr. R. Gedye, 38 Boland Ave., Sudbury, Ont. P3E 1X7. 675-3647.

Visiting professor wishes to rent furnished home, University area preferred, July to December 1982. Call 432-3521 days.

Department chairman seeks clean, two bedroom house or main floor close to University, beginning 1 July 1982. \$400 month. Two cats. S. Brainerd. 432-5990 (leave message with Anita) 1-519-672-5896 evenings.

Architect and journalist and two pre-schoolers, seek house for July, Aug. Exchange possible with beautiful lakefront home in yellowknife, N.W.T. 1-403-873-2412.

### Automobiles and others

SAAB — 1978 SAAB. 99GL. 3-door fuel injection, 30,000 miles AM/FM cassette. Excellent shape. 451-1011, 455-2444.

1978 Ford Stationwagon Ltd. P/s, p/b, cruise control, 65,000 miles. Good condition. Ideal for camping. \$3,900 or best offer. 463-6270 after 5 p.m.

1979 Dodge Omni 024, carefully maintained, excellent condition, 60,000 km. Power steering, cloth upholstery, am/fm radio. \$4,175. 434-2325.

### Goods for sale

For sale — nine piece dining room suite, solid mahogany, mint condition, 481-0131 after 6 p.m. weekdays.  
Plane ticket Edmonton - Toronto 30 June, 436-5719 after 5 p.m.

### Services

Donnic Word Processing. Specializing in theses, etc. 8315A-105 St. 432-1419.  
Singing teacher, Eileen Turner. 439-4661.

General Carpentry Work — Renovations. 434-9709 evenings.

Word Processing \$1.65/page letter quality. 462-3825 after 1 p.m.

For all your plumbing needs, call 462-5784 evenings or 432-3396 days.

School French Alliance. Intensive summer courses (July, Aug.) for adults and children at ALL levels, including kindergarten. 433-7946.

Piano, theory lessons. Western Board. Robert Garipey 433-7238.

Keep-It Yoga for Health Classes. Wednesdays 4:30 p.m. Starts 23 June. Registration 4:30 p.m., 16 June. Room 9, Floor 14, Tory Bldg. Inquiries: Box 184, University Post Office. Sorry, no phone.